(19) 世界知识产权组织 际局

PCT

(10) 国际公布号: WO 2004/025899 A1

(43) 国际公布日: 2004年3月25日(25.03.2004)

(51) 国际分类号7:

H04L 12/28

(21) 国际申请号:

PCT/CN2003/000524

(22) 国际申请日:

2003年7月2日(02.07.2003)

(25) 申请语音:

中文

(26) 公布语旨:

中文

(30) 优先权:

02130660.5

2002年9月16日(16.09.2002)

CN

(71) 申请人(对除美国以外的所有指定国): 联想(北京)有 限公司(LEGEND (BEIJING) LIMITED) [CN/CN]; 中国北京市海淀区上地信息产业基地创业路6号, Beijing 100085 (CN).

(72) 发明人;及 (75) 发明人/申请人(仅对美国): 黄景楠(HUANG, Jingnan) (CN/CN]; 罗于晋(LUO, Yujin) [CN/CN]; 张渊毅 (ZHANG, Yuanyi) [CN/CN]; 刘向东(LIU, Xiangdong) [CN/CN]; 庄渭峰(ZHUANG, Weifeng) |CN/CN|; 光傳魁(ZHANG, Dekui) [CN/CN]; 任艳频(REN, Yanpin) [CN/CN]; 李明(LI, Ming) [CN/CN]; 孟凤(MENG, Chuang) [CN/CN]; 姜璟(JIANG, Shan) [CN/CN]; 中国北京市海淀区上地信息产业基地创业 路6号, Beijing 100085 (CN)。

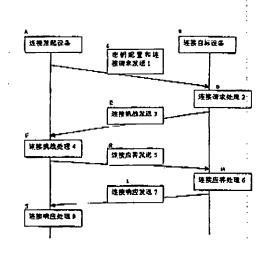
- (74) 代理人: 北京德琦知识帝权代理有限公司(DEQI INTELLECTUAL PROPERTY LAW CORPORATION); 中國北京市海淀区花园东路10号 高德大厦8层, Beijing 100083 (CN)。
- (81) 指定国(国家): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
- (84) 指定国(地区): ARIPO专利(GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), 欧亚专利(AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), 欧洲专利(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI专利(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, \$N, TD, TG)

本国际公布: 包括国际检索报告。

所引用双字母代码和其它输写符号,请参考刊登在每期 PCT公报期刊起始的"代码及缩写符号简要说明"。

(54) Title: THE METHOD FOR CONNECTING DEVICES IN DYNAMIC FAMILY NETWORKING

(54) 发明名称: 家庭网络中实现动态组网时的设备对等连接方法



- A...THE DEVICE INITIATING A CONNECTION
- A...THE DEVICE INITIATING A CONNECTION

 B...THE TARGET DEVICE

 C...KEYS CONFIGURATION AND SEND OUT A CONNECTING REQUEST !

 D...DEAL WITH THE CONNECTING REQUEST 2

 E...SEND A CHALLENGING VALUE OF CONNECTION 3

 F...DEAL WITH THE CHALLENGE OF CONNECTION 4

 C...SEND OUT A RESPONSE MESSAGE OF CONNECTION 5

 I...DEAL WITH THE RESPONSE MESSAGE OF CONNECTION 6

 I...SEND OUT THE CONNECTING RESULT 7

... DEAL WITH THE CONNECTING RESULT 8

(57) Abstract: This invention refers to a method for connecting devices in dynamic family networking, which is to control the equivalent devices in a network with no resource manager. The method used to interconnect the devices includes the steps as follows: The device initiating a connection sends a connecting request to the target device; The target device generates a challenging value of connection randomly and sends it back to the initial one; The initial generates and return a response message based on the challenging value; The target responds to the initial in terms of the former response value about the connecting; And the initial device judges the connecting result by the finally returned message. When the final response shows the connecting successful, the equivalent connection between the initial and the target has been set up. The method for the disconnection includes: if one interconnected side sends a disconnecting massage to the other, the connection will be cut off. Both sides in a connection can be served as a service provider or service user mutually.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN 03/00524

A. CLASS	SIFICATION OF SUB	JECT MATTER				
According t	o International Patent	JPC ⁷ ; Classification (IPC) or to both	H04L			
B. FIEL	DS SEARCHED					
Minimum d	ocumentation scarelies	l (classification system follow	ed by cl	assification symbols)		
			H04L	12/28		
Documenta	tion searched other tha	n minimum documentation to	the exte	int that such documents are included	in the fields searched	
Electronic	lata base consulted dur	ing the international search (n	ame of o	data base and, where practicable, see	arch terms used)	
		WPI,EPOI	OC,PA	J,CNPAT		
C. DOCU	MENTS CONSIDER	O TO BE RELEVANT				
Category*	Citation of doc	ument, with indication, where	арргор	riate, of the relevant passages	Relevant to claim No.	
P,A	CN1381781A	27 November 2002(27.1	1.2002)	See whole document	1-14	
A	CN1356809A	03 July 2002 (03.07.20	02)	See whole document	1—14	
A	CN1372404A,	02 October 2002 (02.10.2	(002)	See whole document	1-14	
Α	WO9859282A2	30 December 1998 (30.12	2.1998)	See whole document	114	
A	WO0038370A1	29 June 2000 (29.06.2000))	See whole document	1—14	
A	WO 0105186A1	18 January 2001(18.01.20	01)	See whole document	1-14	
☐ Furthe	r documents are listed	in the continuation of Box C.	⊠ Sce	patent family annex.		
 Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or 				later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention		
			"X" "Y"	cannot be considered novel or cannot an inventive step when the document document of particular relevance; cannot be considered to involve an	of be considered to involve tent is taken alone the claimed invention to inventive step when the	
other n	other means			document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search 19 September 2003(19.09.2003) arms and mailing address of the ISA/CN			Date of mailing of the international search report 16 OCT 2603 (1 6, 1 0, 0 3)			
Xitucheng Rd., Jimen Bridge, Haidian District, 100088 Beijing, China acsimile No. 86-10-62019451 Drm PCT/ISA/210 (second sheet) (July 1998)				orized officer Cheng Hua hone No. 86-10-62093636	印程	

TERNATIONAL SEARCH REPORT

Information patent family members

Search request No.

Personal			PCT/CN03/00524	
Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
CN1381781A	27-11-2002	US2002163534A1	07-11-2002	
		JP2003006070A	10-01-2003	
		KR2002079203A	19-10-2002	
CN1356809A	03-07-2002	NONE		
CN1372404A	02-10-2002	NONE		
WO9859282A2	30-12-1998	EP1015952A2	05-07-2000	
		CN1269033A	04-10-2000	
		US2001011284A1	02-08-2001	
		KR2001014154A	26-02-2001	
	29-06-2000	JP2002510415T	02-04-2002	
WO0038370A1		KR2001086141A	07-09-2001	
		EP1142201AI	10-10-2001	
		LIS2002002608A1	03-01-2002	
WO0105186A1	18-01-2001	EP1115263A1	11-07-2001	
		JP2001086572A	30-03-2001	
		KR2001072901A	31-07-2001	
		CN1319318A	24-10-2001	